

ABSTRACT OF THE DISCLOSURE

A dynamic transfer syntax efficiently transfers data, including large data images, from a server to at least one client. Source data is transformed into a hierarchical representation. The hierarchical representation, consisting of essentially non-redundant data, is a plurality of levels of transform data, such that a level of the hierarchical representation comprises transform data sufficient to reconstruct the source data at a resolution corresponding to the level. The server transfers transform data from a level of the hierarchical representation corresponding to a desired resolution. To render a new view of the source image at the client, the client requests from the server coefficients of the transform data necessary to reconstruct the new view. In response to the request, the server transfers to the client the additional transform data, and the client reconstructs the new view from the coefficients transferred. A medical imaging application for the dynamic transfer syntax is disclosed.